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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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A. Julie Kadashevich

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LOTUS AND RATIONAL SOFTWARE
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EXAMINER

KAWSAR, ABDULLAH AL

ART UNIT

PAPER NUMBER

2195

NOTIFICATION DATE

DELIVERY MODE

12/24/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

dave@davedagg.com

Office Action Summary	Application No. 10/824,065	Applicant(s) KADASHEVICH, A. JULIE	
	Examiner ABDULLAH AL KAWSAR	Art Unit 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-11,13-15 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-11,13-15 and 20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1, 2, 5-11, 13-15, 20-23 are pending.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/29/2008 has been entered.

Specification

3. The disclosure is objected to because of the following informalities: page 12, paragraph [0034], line 3 "A has table" should be "A hash table".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention. .

5. Claims 1, 2, 5-11, 13-15, 20-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The following claim language is not clearly understood:

- i. Claim 1, line 1 recites “software agent” (i.e. only one software agent in the system?). Line 4 recites “identifying said agent” it is unclear why agent needs to be identified as the system has only one agent as recited in line 1 (i.e. identifying with ID as there are multiple agents?). Line 11 recites "creation of plurality of threads" it is unclear why threads are being created and the relationship between thread, instruction and the creation of thread is not clear (i.e. execution of instructions creating threads?). Line 12-13 recites “adding” and "to said amount" it is unclear if those usage values are the same value or two different values (i.e. thread usage value added to agent usage value or thread usage value added to define agent usage value?). It is not clear if the “system process usage time”, “system processor resource” and “CPU usage” is referred to the same value or different value and what is the relationship between them if those are different value. The relationship between “operating interval”, “agent lifetime”, “thread lifetime” with processor usage time or CPU usage is not clear.
- ii. Claims 13 and 20 has similar deficiency as claim 1 above.
- iii. Claim 9, line 2 recites “determine corrective measure” it is unclear why corrective measure is determined (i.e. was there any problem with the agents? Agents exceed any predetermined usage threshold?).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 5-11 and 13-15 are rejected under 35 U.S.C. 103(a) being unpatentable over Ding et al(Ding) US Patent No. 6691067, in view of Li et al.(Li) US Patent Publication No. 2003/0056200.

8. As per claims 1, Ding teaches the invention substantially as claimed including a method for monitoring system processor usage time of a software agent operating in a computer system, wherein said agent comprises an executable sequence of instructions, said method comprising the steps of (col 6, lines 14-18; lines 20-27):

identifying said agent by associating an agent identifier therewith (col 2, lines 16-20);

initiating, an agent lifetime timer for measuring an operating interval of said agent(col 13, lines 31-39);

determining said operating interval using said lifetime timer by identifying a start time and a completion time of said agent and computing an elapsed time as the difference between said starting time and said completion time for said agent (col 13, lines 21-25; lines 63-67 through col 14, line1);

storing said operating interval, said amount of system processor resources utilized by said agent during said operating interval and said agent identifier in a computer-readable memory(col 9, lines 19-30; col 13, lines 40-55).

Ding does not specifically disclose calculating an amount of system processor resource utilized by said agent during said operating interval by detecting creation of a plurality of threads by said agent, determining CPU usage for each of said plurality of threads and adding said determined CPU usage for each of said plurality of threads to said amount of system processor resources utilized by said agent during said operating interval as each of said plurality of threads expire, wherein each of said plurality of threads is a path of execution such that multiple of said threads can be executed simultaneously

However Li teaches calculating an amount of system processor resource utilized by said agent during said operating interval by detecting creation of a plurality of threads by said agent, determining CPU usage for each of said plurality of threads and adding said determined CPU usage for each of said plurality of threads to said amount of system processor resources utilized by said agent during said operating interval as each of said plurality of threads expire, wherein each of said plurality of threads is a path of execution such that multiple of said threads can be executed simultaneously(par 0034; par. 0039, lines 11-15; par. 0040; 0084; 0096; 0099; 100; 101; 112; par. 0116, lines 13-17; par. 0032 par. 0065, lines 13-16).

9. It would have been obvious to a person of ordinary skill in art at the time of invention was made to incorporate the teaching of Li into the method of Ding for calculating the CPU usage of an agent by determining the CPU usage of the plurality of threads associated with the agent. The modification would have been obvious because one of the ordinary skills of the art would monitor the software agent with the thread associated with the agent to be able to calculate a precise CPU usage.

Ding does not specifically disclose initiating, responsive to said identifying of said agent.

It would have been obvious to a person of ordinary skill in art at the time of invention was made to initiate the monitoring system for a process using the process id after identifying the agent/process to able to track the resource usage or any kind of process activity in the system.

10. As per claim 2, Ding teaches the said computer-readable memory includes a hash table (col 9, lines 31-43).

11. As per claim 5, Ding teaches that associating said operating interval and said agent identifier with other operating intervals and agent identifiers associated with a plurality of other software agents operating in said system (col 7, lines 21-24; col 13, lines 18-39).

12. As per claim 6, Ding teaches that filtering said agent and said plurality of other agents according to predefined filtering criteria to produce a filtered set (col 10, lines 64-67 through col 11, lines 1-6).

13. As per claim 7, Ding teaches the rank ordering said filtered set (col 10, lines 55-57).

14. As per claim 8, Ding teaches that making said filtered set available to a display device (col 7, lines 37-43; col 10, lines 64-67 through col 11, lines 1-6).

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15. As per claim 9, Ding teaches that determining a corrective measure for at least one member of said filtered set (col 11, lines 1-10; lines 54-67 through col 12, lines 1-4).

16. As per claim 10, Ding teaches that displaying said corrective measure on a display device (col 11, lines 26-31; lines 54-67 through col 12, lines 1-4).

17. As per claim 11, Ding teaches that corrective measure is implemented by said system (col 21, lines 53-67).

18. As per claim 13, Ding teaches the invention substantially as claimed including a method for monitoring system processor time usage of a software agent said agent having an agent lifetime, wherein said agent comprises an executable sequence of instructions, said method comprising the steps of(col 6, lines 14-18; lines 20-27):

associating an agent identifier with said agent (col 2, lines 16-20);

initiating, an agent lifetime timer for monitoring said agent lifetime (col 13, lines 31-39);

determining system processor resource allocations associated with said agent, by identifying a start time and a completion time of said agent and computing said agent lifetime as the difference between said starting time and said completion time for said agent, said resource allocations defining a footprint for said agent comprising(col 13, lines 31-39):

an amount of system processor resources utilized by said thread during said thread lifetime (col 13, lines 31-39); and

an amount of system processor resources utilized by said agent during said agent lifetime (col 13, lines 31-39);

associating said footprint with said agent identifier (col 10, lines 33-46);

storing said footprint and said agent identifier in a computer-readable memory(col 9, lines 31-43);

comparing said footprint of said agent to a plurality of footprints associated with a like plurality of other software agents(col 10, lines 53-17;col 7, lines 21-24);

ranking said footprint of said agent against said plurality of footprints(col 10, lines 55-57); and

displaying those of said agent footprint and said plurality of footprints exceeding a predefined threshold (col 7, lines 37-49).

Ding does not specifically disclose an amount of system processor resource utilization by said agent during said agent lifetime calculating by detecting creation of a plurality of threads by said agent, determining CPU usage for each of said plurality of threads and adding said determined CPU usage for each of said plurality of threads to said amount of system processor resources utilized by said agent during said operating interval as each of said plurality of threads expire, wherein each of said plurality of threads is a path of execution such that multiple of said threads can be executed simultaneously.

However Li teaches an amount of system processor resource utilization by said agent during said agent lifetime calculating by detecting creation of a plurality of threads by said agent, determining CPU usage for each of said plurality of threads and adding said determined CPU

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usage for each of said plurality of threads to said amount of system processor resources utilized by said agent during said operating interval as each of said plurality of threads expire, wherein each of said plurality of threads is a path of execution such that multiple of said threads can be executed simultaneously (par 0034; par. 0039, lines 11-15; par. 0040; 0084; 0096; 0099; 100; 101; 112; par. 0116, lines 13-17; par. 0032 par. 0065, lines 13-16).

19. It would have been obvious to a person of ordinary skill in art at the time of invention was made to incorporate the teaching of Li into the method of Ding for calculating the CPU usage of an agent by determining the CPU usage of the plurality of threads associated with the agent. The modification would have been obvious because one of the ordinary skills of the art would monitor the software agent with the thread associated with the agent to be able to calculate a precise CPU usage.

Ding does not specifically disclose initiating, responsive to said associating said agent identifier with said agent.

It would have been obvious to a person of ordinary skill in art at the time of invention was made to initiate the monitoring system for a process using the process id after identifying the agent/process to able to track the resource usage or any kind of process activity in the system.

20. As per claim 14, Ding teaches that establishing a system processor resources configuration threshold defining a maximum amount of system processor resources to be utilized

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by each of said software agent and said plurality of other software agents (col 6, lines 20-27; col 7, lines 39-49).

21. As per claim 15, Ding teaches that running a collection probe to determine if a total amount of consumed system processor resources exceeds said configuration threshold(col 7, lines 39-42); and

performing said initiating step when said total amount of consumed system processor resources exceeds said configuration threshold (col 8, lines 1-26).

22. Claims 20-23 are rejected under 35 U.S.C. 103(a) being unpatentable over Ding et al.(Ding) US Patent No. 6691067, in view of Li et al.(Li) US Patent Publication No. 2003/0056200 and further in view of Freeman(Freeman) US Patent No. 6330588.

23. As per claim 20, Ding teaches the invention substantially as claimed including a method for tracking system processor time of a target agent operatively associated with a hypertext transport protocol process operating on a computer system and running a plurality of threads, wherein said target agent comprises an executable sequence of instructions (col 6, lines 14-18; lines 20-27; col 8, lines 17-26), said method comprising:

creating a computer-readable hash table in a memory operatively associated with said computer system (col 9, lines 31-43);

initiating an agent tracking function in machine-executable code in said computer system(col 9, lines 24-26);

determining an amount of said system processor time utilized by said identified thread set(col 13, lines 31-39);

storing said system processor time for said identified thread set in said hash table, thereby tracking said system processor time of said target agent(col 9, lines 31-43).

Ding does not specifically disclose identifying a plurality of threads created by said target agent and associating a thread identifier with each of said plurality of threads to produce an identified thread set (col 10, lines 39-45); determining CPU usage for each of said plurality of threads and adding said determined CPU usage for each of said plurality of threads to said amount of system processor resources utilized by said agent during said operating interval as each of said plurality of threads expire, wherein each of said plurality of threads is a path of execution such that multiple of said threads can be executed simultaneously (par 0034; par. 0039, lines 11-15; par. 0040; 0084; 0096; 0099; 100; 101; 112; par. 0116, lines 13-17; par. 0032; par. 0065, lines 13-16).

However Li teaches identifying a plurality of threads created by said target agent and associating a thread identifier with each of said plurality of threads to produce an identified thread set (par. 0040; par. 0065, lines 13-16; par. 0096);

determining CPU usage for each of said plurality of threads and adding said determined CPU usage for each of said plurality of threads to said amount of system processor resources utilized by said agent during said operating interval as each of said plurality of threads expire, wherein each of said plurality of threads is a path of execution such that multiple of said threads

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can be executed simultaneously (par 0034; par. 0039, lines 11-15; par. 0040; 0084; 0096; 0099; 100; 101; 112; par. 0116, lines 13-17; par. 0032 par. 0065, lines 13-16).

24. It would have been obvious to a person of ordinary skill in art at the time of invention was made to incorporate the teaching of Li into the method of Ding for calculating the CPU usage of an agent by determining the CPU usage of the plurality of threads associated with the agent. The modification would have been obvious because one of the ordinary skills of the art would monitor the software agent with the thread associated with the agent to be able to calculate a precise CPU usage.

Ding does not specifically disclose target agent operatively associated with a hypertext transport protocol process operating on a computer system.

However, Freeman teaches that target agent operatively associated with a hypertext transport protocol process operating on a computer system and (col 2, lines 5-8; col 5, lines 51-62).

25. It would have been obvious to a person of ordinary skill in art at the time of invention was made to incorporate the teaching of Freeman into the method of Ding to have target agent operatively associated with a hypertext transport protocol process operating on a computer system. The modification would have been obvious because one of the ordinary skills of the art would monitor the software agent to confirm their activity and fix issues that causing the agent to

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stall which can include entire process agent running in the system including hyper transport protocol process.

26. As per claim 20, Ding teaches computing statistics for said identified thread set(col 10, lines 64-67 through col 11, lines 1-6).

27. As per claim 21, Ding teaches rank ordering those of said plurality of identified threads having said target agent operating therewith (col 10, lines 55-57).

28. As per claim 22, Ding teaches providing said identified set to a display device (col 7, lines 37-43; col 10, lines 64-67 through col 11, lines 1-6).

Response to Arguments

29. Applicant's arguments with respect to claim(s) have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABDULLAH AL KAWSAR whose telephone number is (571)270-3169. The examiner can normally be reached on 7:30am to 5:00pm, EST.

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31. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng Ai T. An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

32. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

/Abdullah-Al Kawsar/
Examiner, Art Unit 2195